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Morikawa

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[54] **ELECTRONIC MAIL PROCESSING SYSTEM AND ELECTRONIC MAIL PROCESSING METHOD**

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[21] Appl. No.: **766,359**

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Related U.S. Application Data

[63] Continuation of Ser. No. 198,900, Feb. 18, 1994, Pat. No. 5,613,108.

[30] **Foreign Application Priority Data**

Feb. 24, 1993 [JP] Japan 5-035273

[51] **Int. Cl.**[6] **G06F 17/30**

[52] **U.S. Cl.** **707/200**; 707/3; 707/9; 707/10; 707/1

[58] **Field of Search** 395/616, 200.04, 395/185.01, 51; 370/94.1; 364/514; 707/1, 3, 9, 10, 200

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[57] **ABSTRACT**

An electronic mail system in which a mail management method is improved in order to reduce the complexity and labour of handling transmitted information so that its convenience is increased. In an electronic mail system in which a plurality of data processing systems exchange messages through mailboxes MB utilizing the stored and forward system, the data processing system which receives a mail M transferred from the mailbox MB is provided with an electronic mail terminal utility. When the data processing system receives the mail M, the electronic mail terminal utility classifies a data file written in the mail M according to specific data contained in the mail M and stores the data file in an appropriate folder based on a result of the classification.

22 Claims, 8 Drawing Sheets

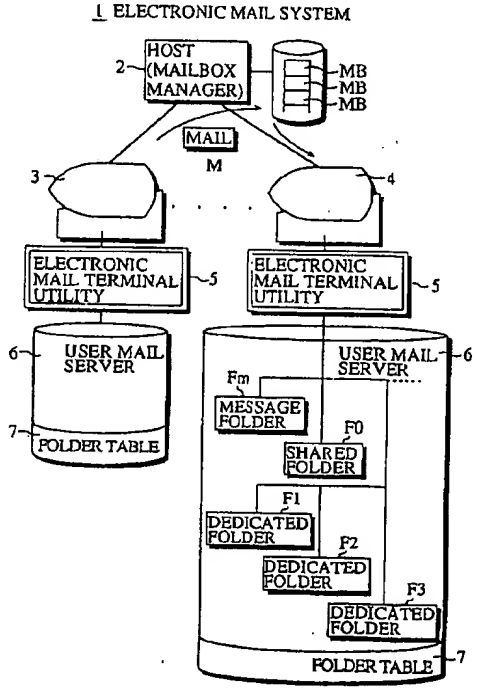


Fig. 1

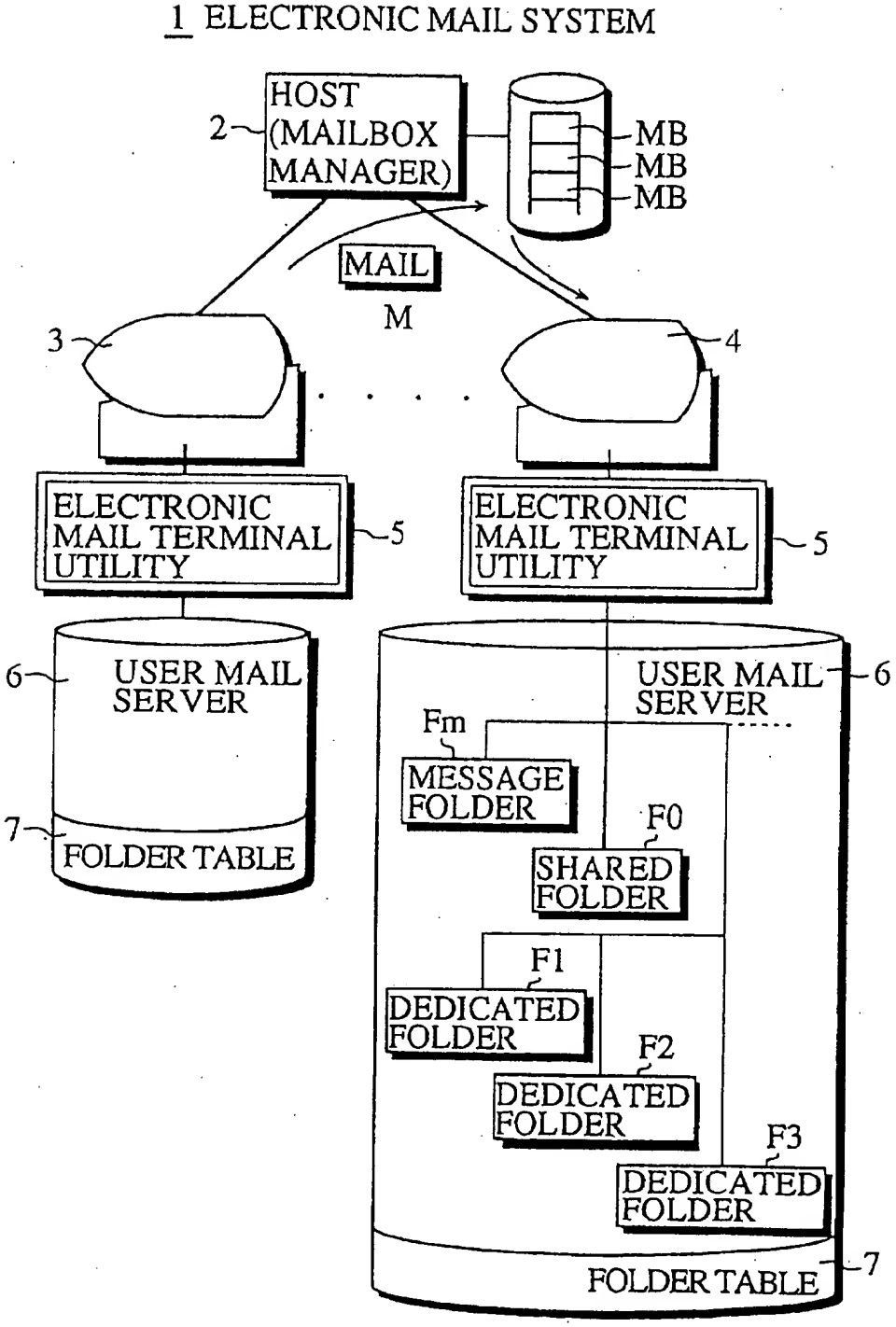

1 ELECTRONIC MAIL SYSTEM
HOST (MAILBOX MANAGER)
2
MB
MB
MB
MAIL
M
3
4
ELECTRONIC MAIL TERMINAL UTILITY
5
ELECTRONIC MAIL TERMINAL UTILITY
5
6
USER MAIL SERVER
7
FOLDER TABLE
USER MAIL SERVER
6
Fm
MESSAGE FOLDER
F0
SHARED FOLDER
F1
DEDICATED FOLDER
F2
DEDICATED FOLDER
F3
DEDICATED FOLDER
FOLDER TABLE
7

Fig. 2

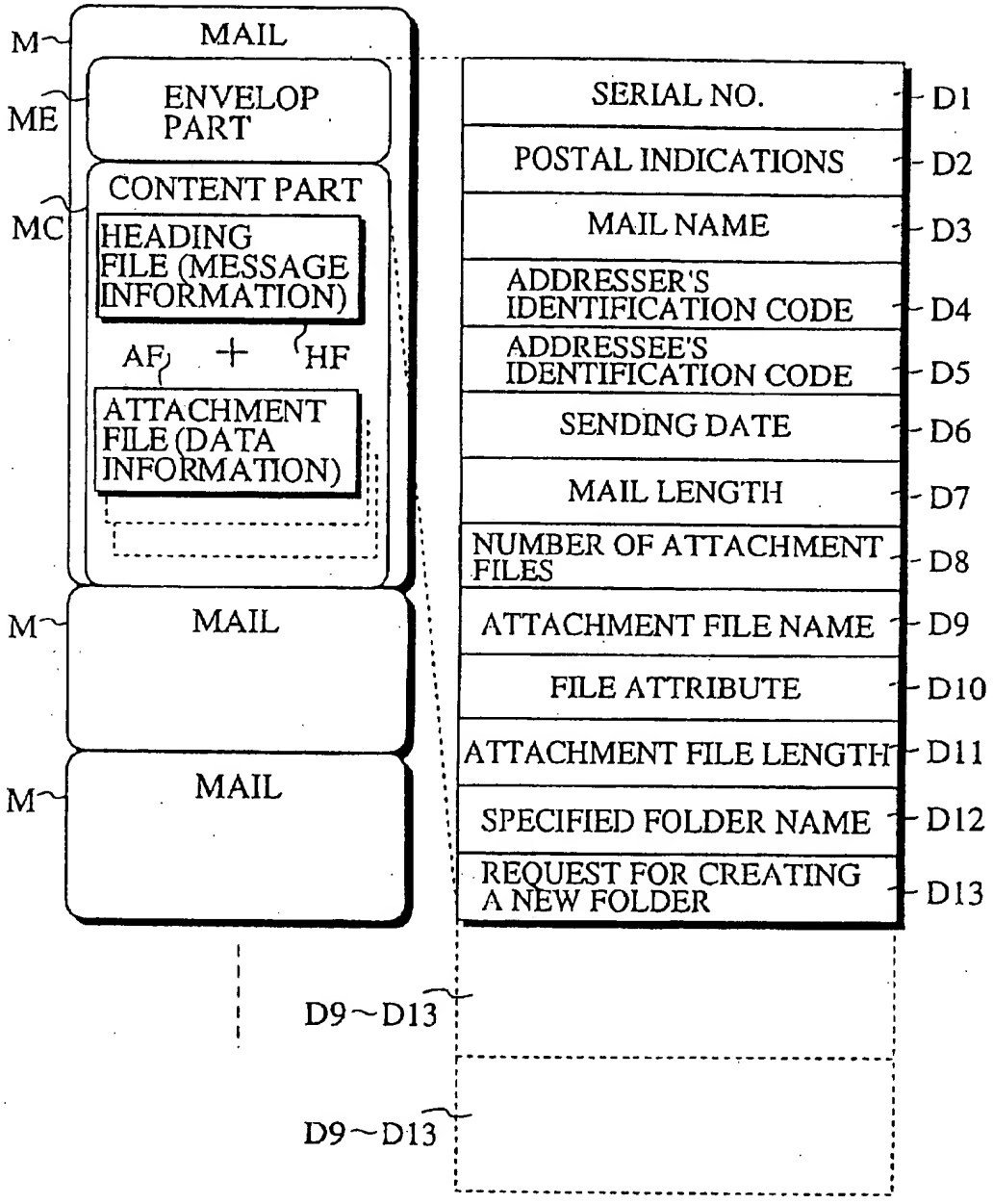

M
MAIL
ME
ENVELOP PART
CONTENT PART
MC
HEADING FILE (MESSAGE INFORMATION)
AF + HF
ATTACHMENT FILE (DATA INFORMATION)
M
MAIL
M
MAIL
SERIAL NO. D1
POSTAL INDICATIONS D2
MAIL NAME D3
ADDRESSER'S IDENTIFICATION CODE D4
ADDRESSEE'S IDENTIFICATION CODE D5
SENDING DATE D6
MAIL LENGTH D7
NUMBER OF ATTACHMENT FILES D8
ATTACHMENT FILE NAME D9
FILE ATTRIBUTE D10
ATTACHMENT FILE LENGTH D11
SPECIFIED FOLDER NAME D12
REQUEST FOR CREATING A NEW FOLDER D13
D9~D13
D9~D13

Fig. 3

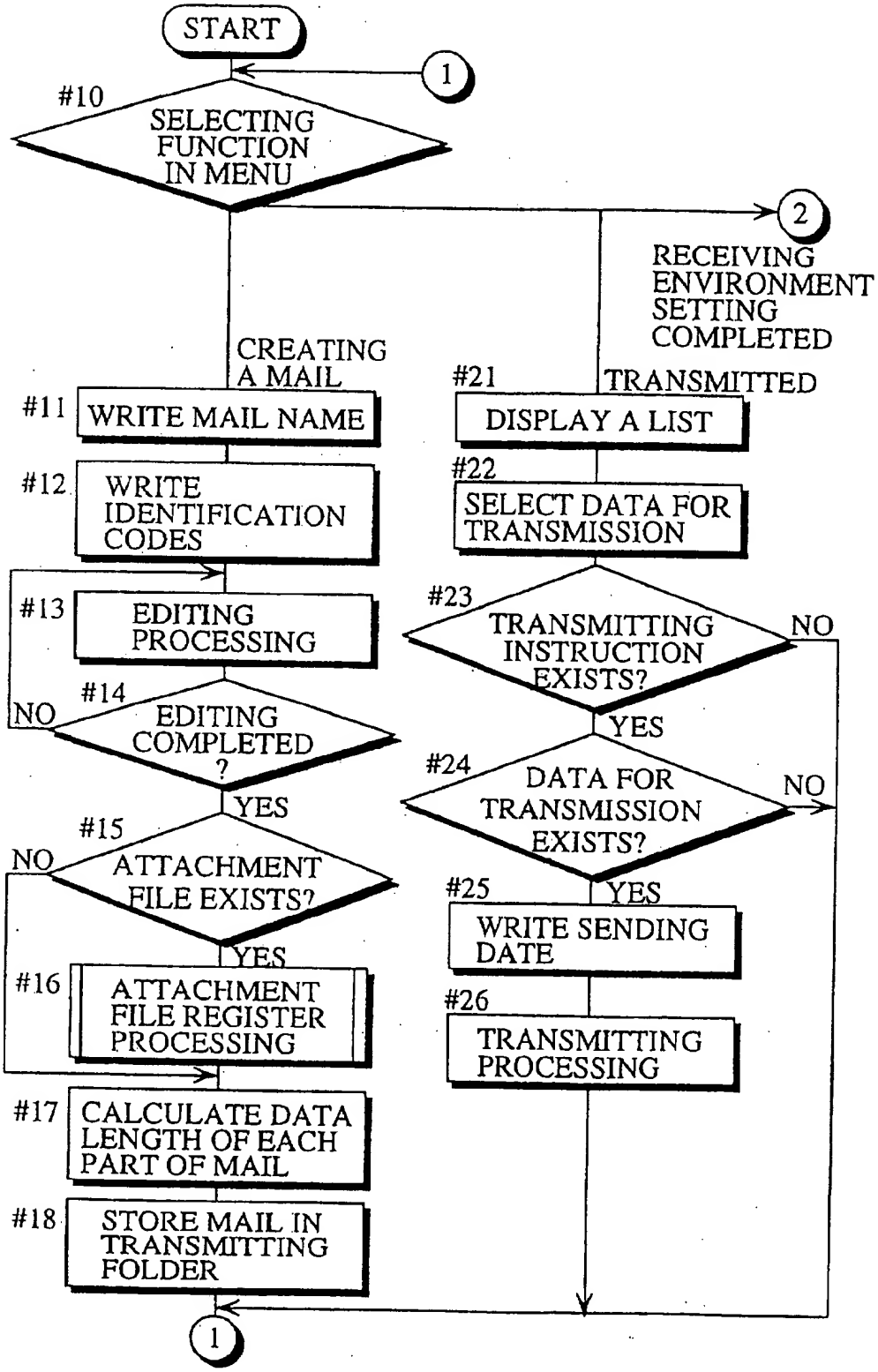

START
1
#10
SELECTING FUNCTION IN MENU
2
CREATING A MAIL
RECEIVING ENVIRONMENT SETTING COMPLETED
TRANSMITTED
#11
WRITE MAIL NAME
#12
WRITE IDENTIFICATION CODES
#13
EDITING PROCESSING
#14
NO
EDITING COMPLETED ?
YES
#15
NO
ATTACHMENT FILE EXISTS?
YES
#16
ATTACHMENT FILE REGISTER PROCESSING
#17
CALCULATE DATA LENGTH OF EACH PART OF MAIL
#18
STORE MAIL IN TRANSMITTING FOLDER
1
#21
DISPLAY A LIST
#22
SELECT DATA FOR TRANSMISSION
#23
TRANSMITTING INSTRUCTION EXISTS?
NO
YES
#24
DATA FOR TRANSMISSION EXISTS?
NO
#25
YES
WRITE SENDING DATE
#26
TRANSMITTING PROCESSING

Fig. 4

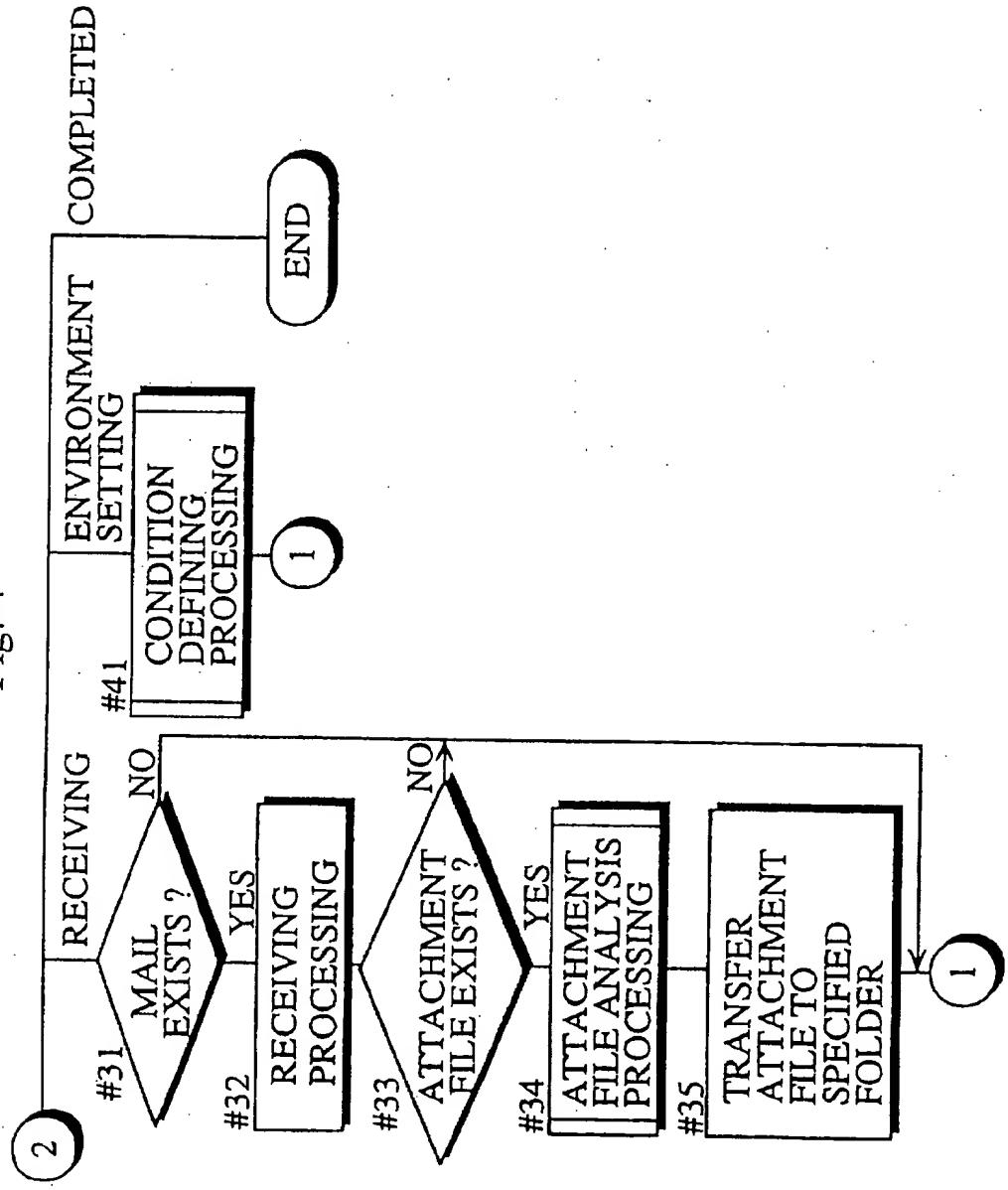

COMPLETED
END
ENVIRONMENT SETTING
#41
CONDITION DEFINING PROCESSING
1
RECEIVING
2
#31
MAIL EXISTS ?
NO
YES
#32
RECEIVING PROCESSING
#33
ATTACHMENT FILE EXISTS ?
NO
YES
#34
ATTACHMENT FILE ANALYSIS PROCESSING
#35
TRANSFER ATTACHMENT FILE TO SPECIFIED FOLDER
1

Fig. 5

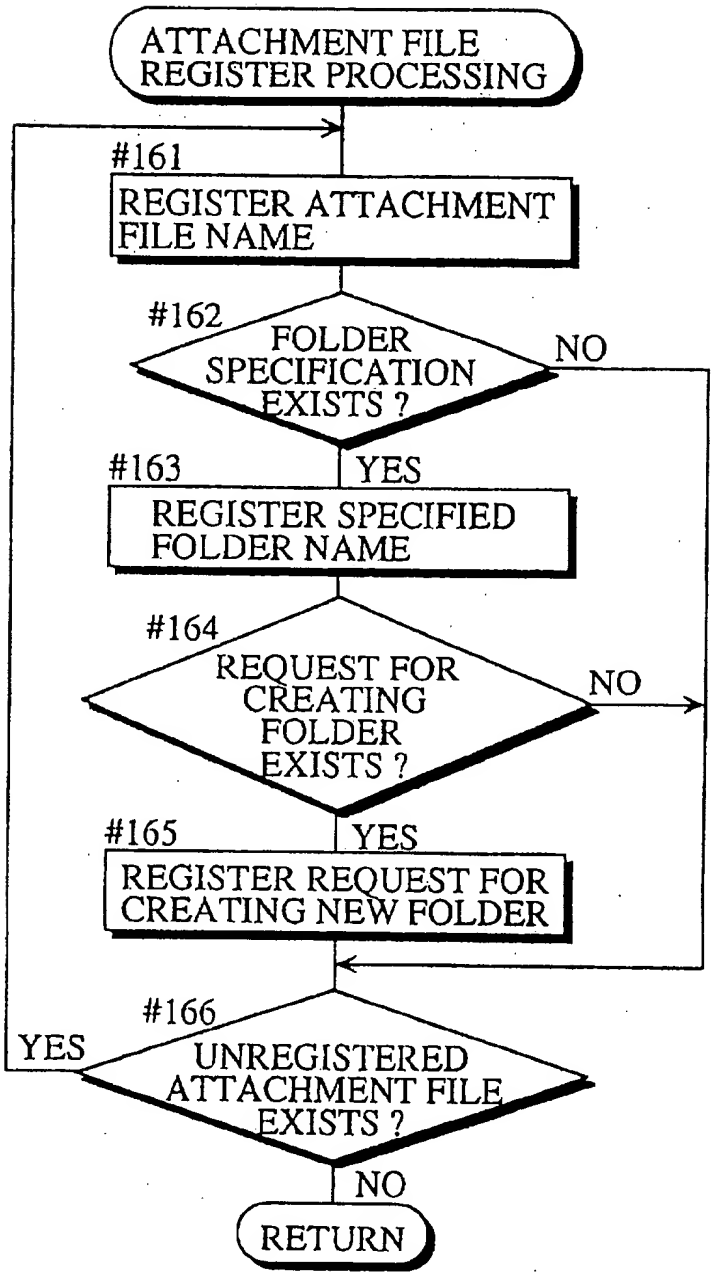

ATTACHMENT FILE REGISTER PROCESSING
#161
REGISTER ATTACHMENT FILE NAME
#162
FOLDER SPECIFICATION EXISTS ?
NO
YES
#163
REGISTER SPECIFIED FOLDER NAME
#164
REQUEST FOR CREATING FOLDER EXISTS ?
NO
YES
#165
REGISTER REQUEST FOR CREATING NEW FOLDER
#166
UNREGISTERED ATTACHMENT FILE EXISTS ?
YES
NO
RETURN

Fig. 6

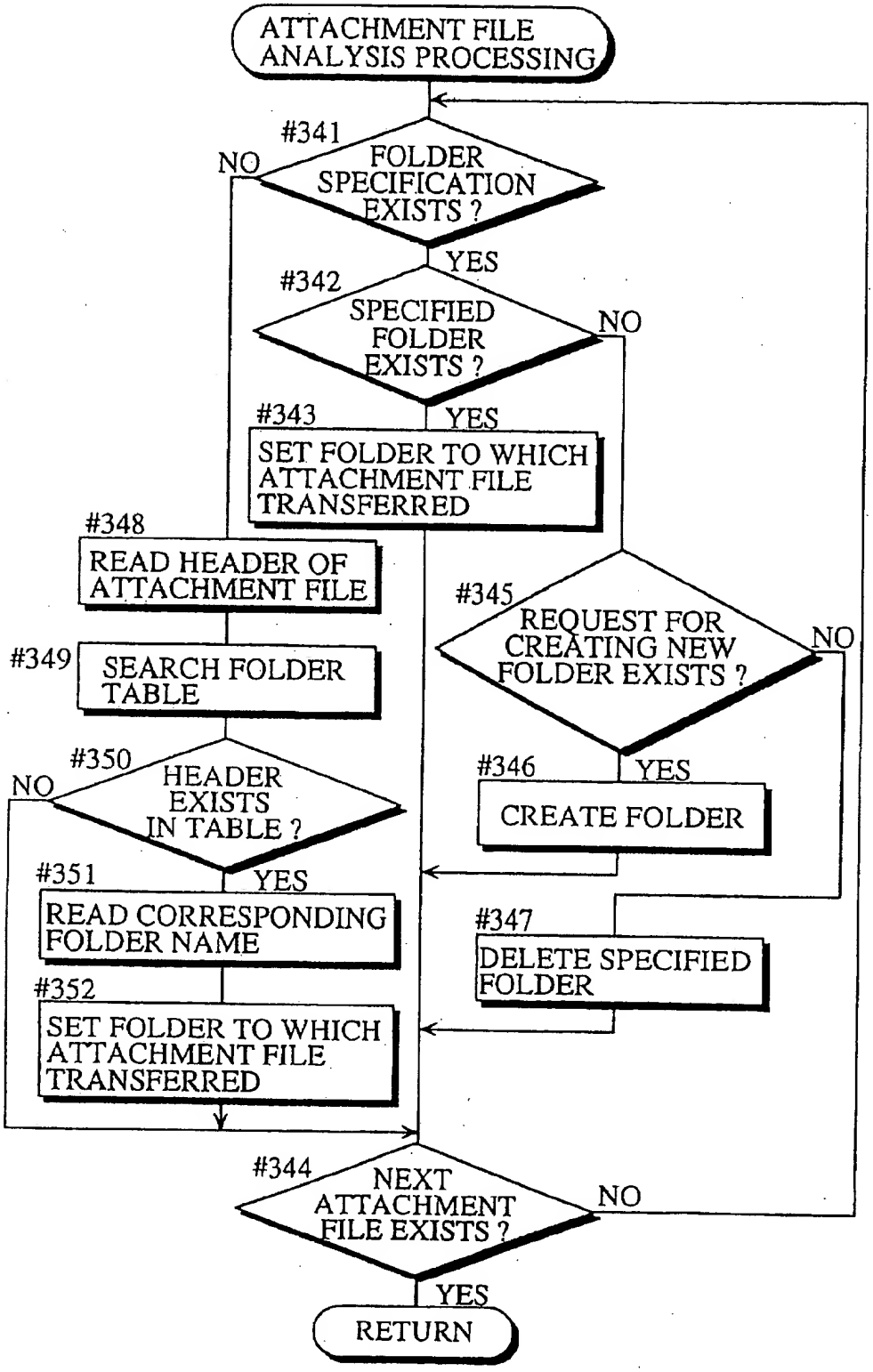

ATTACHMENT FILE ANALYSIS PROCESSING
#341
FOLDER SPECIFICATION EXISTS ?
NO
YES
#342
SPECIFIED FOLDER EXISTS ?
NO
YES
#343
SET FOLDER TO WHICH ATTACHMENT FILE TRANSFERRED
#348
READ HEADER OF ATTACHMENT FILE
#349
SEARCH FOLDER TABLE
#350
HEADER EXISTS IN TABLE ?
NO
YES
#351
READ CORRESPONDING FOLDER NAME
#352
SET FOLDER TO WHICH ATTACHMENT FILE TRANSFERRED
#345
REQUEST FOR CREATING NEW FOLDER EXISTS ?
NO
#346
YES
CREATE FOLDER
#347
DELETE SPECIFIED FOLDER
#344
NEXT ATTACHMENT FILE EXISTS ?
NO
YES
RETURN

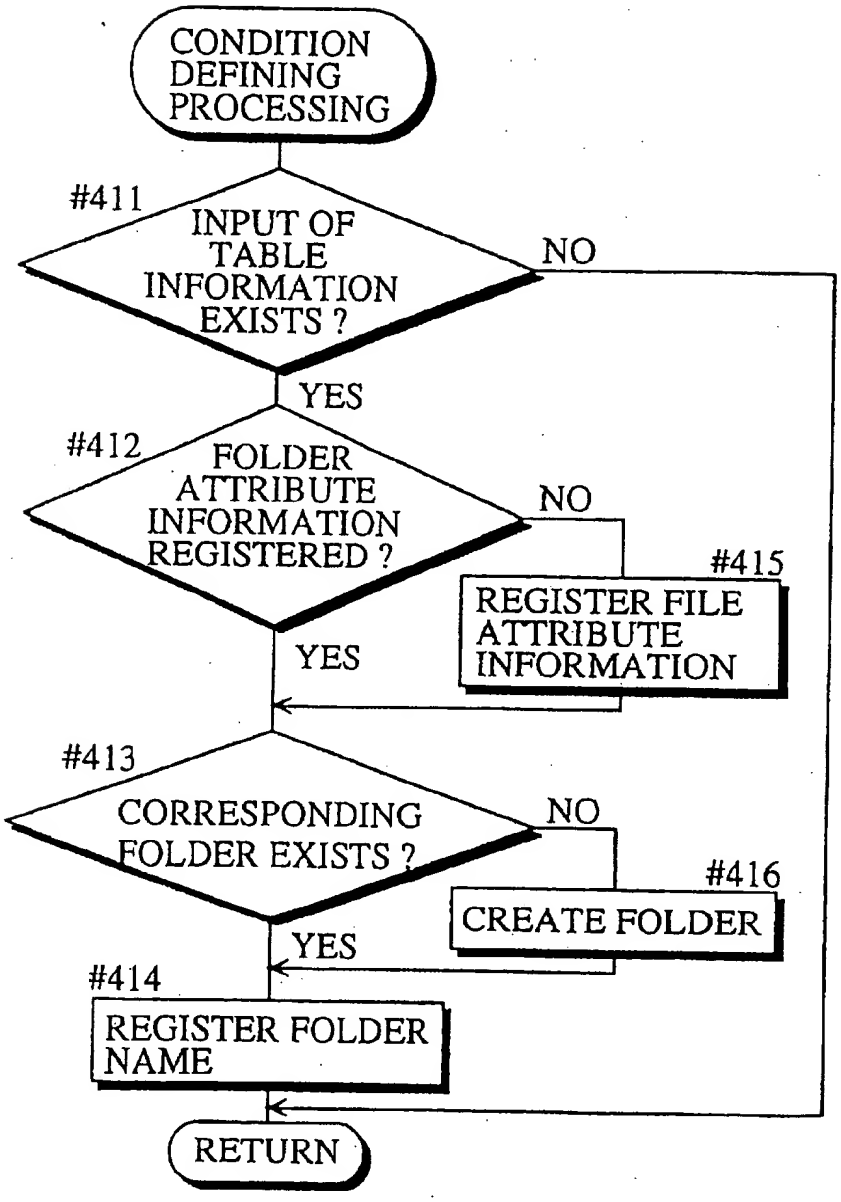
Fig. 7

7 FOLDER TABLE

Att

HEADER CODE STRINGS (FILE ATTRIBUTE INFORMATION)					FOLDER NAME
0C	1B	57	50	31	FOLDER 1
0C	1B	43	4B	31	FOLDER 2
0C	1B	2D	46	31	FOLDER 3
⋮					⋮

Fig. 8


CONDITION DEFINING PROCESSING
#411
INPUT OF TABLE INFORMATION EXISTS ?
NO
YES
#412
FOLDER ATTRIBUTE INFORMATION REGISTERED ?
NO
#415
REGISTER FILE ATTRIBUTE INFORMATION
YES
#413
CORRESPONDING FOLDER EXISTS ?
NO
#416
CREATE FOLDER
YES
#414
REGISTER FOLDER NAME
RETURN

ELECTRONIC MAIL PROCESSING SYSTEM AND ELECTRONIC MAIL PROCESSING METHOD

This is a continuation of prior application Ser. No. 08/198,900, filed on Feb. 18, 1994, for AN ELECTRONIC MAIL PROCESSING SYSTEM AND ELECTRONIC MAIL PROCESSING METHOD, and now U.S. Pat. No. 5,613,108.

BACKGROUND OF THE INVENTION

(1) Field of the Invention

The present invention relates to an electronic mail processing system and electronic mail processing method.

(2) Related Arts

Data communication called "electronic mail" in which a store and forward system is adopted is widely made through various networks such as local area networks and private communication networks.

An electronic mail system is generally composed of a host processor undertaking the management of electronic mailboxes and a plurality of computer systems with the function of transmitting and receiving mails. A mail, which is one unit of transmitted data, consists of an envelop part containing control information such as a user's address and postal indications; and a content part containing optional information which is the main information of transmitted data.

Control information in the envelop part is used when the host processor performs mail transfer processing and the format (the arrangement of data) of the envelop part is fixed in the system.

Optional information in the content part is classified into message information such as messages to be conveyed from one end user to another and data information such as programs and numerical data. Usually, when data information is transmitted, message information is also transmitted as a "transmission notice" and in such a case, the content part consists of one or a plurality of heading files corresponding to the message information and one or a plurality of data files corresponding to the data information. In this case, each of the data files is incorporated in a mail, being attached to the heading file, and the data file is, therefore, called "attachment file".

In a known electronic mail system, a computer system (hereinafter referred to as "receiving terminal") which receives a mail from a host processor stores a mail in a receiving folder (storage area) irrespective of the contents of the mail.

The operator for the receiving terminal (a user operating the receiving terminal) looks at a list of mails stored in the receiving folder at a convenient time and accesses a desired mail to see its contents. If there is an attachment file, the operator instructs "folder changing", i.e., transferring of an attachment file from the receiving folder (shared folder) to a dedicated folder. At that time, the operator identifies the file attribute of the attachment file from message information (e.g., a file name or addressee's name) and specifies a dedicated folder suited for the identified file attribute.

In such a system, the classification of file attributes is at the discretion of the operator and the operator can preliminarily create dedicated folders in consideration of the working situation of the system. For example, if the file is created by using applications software which allows the user to create attachment files, the file will be transferred to a dedicated folder for word-processing software and if the file is created by using worksheet software, it will be transferred to a dedicated folder for worksheet software.

When a plurality of users operate receiving terminals, for example, in an office, a dedicated folder is provided for every hierarchically classified item, that is, each user has his own dedicated folders.

Since attachment files are thus sorted by the use of the dedicated files, when the operator carries out, later on, a specific type of work such as word-processing, invoicing or accounting using particular applications software, the attachment files can be easily accessed by the applications software and therefore the operational efficiency of the system increases. Even if there are a plurality of users, each user can readily access his attachment file.

Such an electronic mail system makes it more convenient to use information received in the form of attachment files.

Such a conventional system, however, presents the disadvantage that sorting of attachment files is not executed until the operator's instruction is released and the operator has to take the burden of doing many works at the time of sorting, such as accessing a mail, confirming message information, identifying the attribute of each attachment file, selecting a dedicated folder for each attachment file and instructing a transfer of an attachment file to the dedicated file which has been selected.

SUMMARY OF THE INVENTION

A prime object of the invention is therefore to reduce the complexity and labour of handling transmitted information such as data information, thereby increasing the convenience of an electronic mail system.

The above object is fulfilled by an electronic mail processing system comprising a receiving device for receiving an electronic mail from a host processor which undertakes the management of mailboxes, a plurality of folders for storing an electronic mail, and a management device for classifying a data file written in the received electronic mail in accordance with specific data included in the electronic mail, and selecting a folder for storing the data file in accordance with a result of the classification.

The electronic mail received by the receiving device may comprise an envelop part containing control information used for transmission processing performed by the host processor and a content part containing main information to be transmitted, the data file and the specific data may be contained in the content part, and the management device may comprise a data file extraction unit for extracting the data file from the content part and a folder selection unit for classifying the extracted data file in accordance with the specific data, and selecting a folder for storing the data file in accordance with a result of the classification.

The data file to be classified may be an attachment file attached to a heading file containing message information, and the data file extraction unit may be an attachment file extraction unit for discriminating between the heading file and the attachment file which are contained in the content part and extracting the attachment file from the content part.

The specific data may be file attribute information contained in the attachment file, the management device may include a file attribute information extraction unit for extracting the file attribute information from the attachment file extracted by the attachment file extraction unit, and the folder selection unit may include a table for showing the association between the file attribute information and folders and a table search unit for searching the table in accordance

with the extracted file attribute information to classify the attachment file.

The electronic mail received by the receiving device may comprise an envelop part which contains control information used for transmission processing performed by the host processor and whose format is fixed, and a content part containing main information to be transmitted, the specific data may be folder specification information written in the envelop part, and the management device may include a folder selection unit for classifying the data file based on the folder specification information written in the envelop part and selecting a folder for storing the data file in accordance with a result of the classification.

The management device may further include a folder creating unit for creating a new folder if the folder selected by the folder selection unit does not exist.

The data file to be classified may be an attachment file attached to a heading file containing message information, and the management device may include an attachment file extraction unit for discriminating between the heading file and the attachment file which are contained in the content part and extracting the attachment file from the content part.

The electronic mail received by the receiving device may comprise an envelop part which contains control information used for transmission processing performed by the host processor and a content part containing main information to be transmitted, the data file to be classified may be an attachment file attached to a heading file which is included in the content part, containing message information, and the management device may include a folder specification information searching unit for searching the envelop part for folder specification information and selecting a folder used to store the attachment file in accordance with the folder specification information if it exists in the envelop part, a folder creating unit for creating a new folder if the folder selected by the folder specification information searching unit does not exist, and an attachment file attribute information searching unit for extracting file attribute information from the attachment file and selecting a folder used to store the attachment file in accordance with the extracted file attribute information if the folder specification information does not exist in the envelop part.

The above object is fulfilled by an electronic mail processing method comprising the 1st step of receiving an electronic mail from a host processor which undertakes the management of mailboxes, the 2nd step of storing the received electronic mail in a first folder, the 3rd step of classifying a data file written in the electronic mail which has been stored in the first folder in accordance with specific data contained in the electronic mail, the 4th step of selecting a second folder for storing the data file in accordance with a result of the classification in the 3rd step, and the 5th step of transferring the data file written in the electronic mail stored in the first folder to the second folder.

The electronic mail may comprise an envelop part containing control information used for transmission processing performed by the host processor and a content part containing main information to be transmitted, the data file and the specific data may be contained in the content part, and the 3rd step may include the 1st sub-step of extracting the data file from the content part of the electronic mail stored in the first folder and the 2nd sub-step of classifying the extracted data file in accordance with the specific data.

The data file to be classified may be an attachment file attached to a heading file containing message information, and the 1st sub-step of the 3rd step may be for discriminating between the heading file and the attachment file which are contained in the content part of the electronic mail stored in the first folder and extracting the attachment file from the content part.

The specific data may be file attribute information contained in the attachment file, and the 2nd sub-step of the 3rd step may be for extracting the file attribute information from the attachment file extracted in the 1st sub-step and searching a table which shows the association between the file attribute information and folders, based on the extracted file attribute information in order to classify the attachment file.

The above object is also fulfilled by an electronic mail processing method comprising the 1st step of receiving an electronic mail from a host processor which undertakes the management of mailboxes, the 2nd step of storing the received electronic mail in a first folder, the 3rd step of classifying a data file written in the electronic mail which has been stored in the first folder in accordance with specific data contained in the electronic mail, the 4th step of selecting a second folder for storing the data file in accordance with a result of the classification in the 3rd step, and the 5th step of transferring the data file written in the electronic mail stored in the first folder to the second folder.

The electronic mail received by the receiving device may comprise an envelop part which contains control information used for transmission processing performed by the host processor and whose format is fixed, and a content part containing main information to be transmitted, the specific data may be folder specification information written in the envelop part, and the 3rd step may include the sub-step of selecting a folder for storing the data file in accordance with the folder specification information written in the envelop part.

The 4th step may include the sub-step of creating the second folder if the second folder which has been selected does not exist.

The data file to be classified may be an attachment file attached to a heading file containing message information, the sub-step of the 3rd step may be for discriminating between the heading file and the attachment file which are contained in the content part of the electronic mail stored in the first folder and extracting the attachment file from the content part.

The above object is also fulfilled by an electronic mail processing method comprising the 1st step of receiving an electronic mail from a host processor which undertakes the management of mailboxes, the 2nd step of storing the received electronic mail in a first folder, the 3rd step of classifying a data file written in the electronic mail which has been stored in the first folder in accordance with specific data contained in the electronic mail, the 4th step of selecting a second folder for storing the data file in accordance with a result of the classification in the 3rd step, and the 5th step of transferring the data file written in the electronic mail stored in the first folder to the second folder.

The electronic mail received by the receiving device may comprise an envelop part containing control information used for transmission processing performed by the host processor and a content part containing main information to be transmitted, the data file to be classified may be an attachment file attached to a heading file, and the attachment file is included in the content part while the heading file contains message information, and the 3rd step may include the 1st sub-step of searching the envelop part for folder specification information and selecting a folder used for storing the attachment file in accordance with the folder

specification information if it exists in the envelop part, the 2nd sub-step of creating a new folder if the selected folder does not exist, and the 3rd sub-step of extracting file attribute information from the attachment file and selecting a folder for storing the attachment file in accordance with the file attribute information if the folder specification information does not exist in the envelop part.

The 3rd sub-step of the 3rd step may be for searching a table which shows the association between the file attribute information and folders, in accordance with the extracted file attribute information to classify the attachment file if the folder specification information does not exist in the envelop part and for selecting a folder for storing the attachment file in accordance with a result of the classification.

According to the invention, when a mail is received from the mail box, a data file corresponding to a part of or whole transmitted information excluding the envelop part is classified for management in accordance with specific data stored in any part of the whole mail including the envelop part. Specifically, a data file of a received mail will be stored in a folder specified by the contents of specific data in the mail. This enables automatic sorting of data files of a plurality of mails which have been received in batches or separately.

With this arrangement, the labour and complexity of handling transmitted information such as data information can be reduced so that the convenience of the electronic mail system is increased.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other objects, advantages and features of the invention will become apparent from the following description thereof taken in conjugation with the accompanying drawings which illustrate a specific embodiment of the invention. In the drawings:

FIG. 1 is a block diagram schematically showing the structure of an electronic mail system according to an embodiment of the invention;

FIG. 2 is a diagram showing the arrangement of data in a mail;

FIG. 3 is a flowchart schematically showing processing performed by an electronic mail terminal utility;

FIG. 4 is a flowchart schematically showing processing performed by an electronic mail terminal utility;

FIG. 5 is a flowchart showing the details of the attachment file register processing of FIG. 3;

FIG. 6 is a flowchart showing the details of the attachment file analysis processing of FIG. 4;

FIG. 7 is a diagram showing one example of the contents of a folder table; and

FIG. 8 is a flowchart showing the details of the condition defining processing of FIG. 4.

PREFERRED EMBODIMENT

FIG. 1 schematically shows, in block form, the structure of an electronic mail system 1 according to one embodiment of the invention.

The electronic mail system 1 is composed of a host 2 undertaking the management of mailboxes MB; and a plurality of data processing systems 3, 4 for transmitting data to each other through the host 2.

The host 2 is, for example, a general-purpose large-sized computer system and has the function of providing various network services including electronic mail service (i.e., mailbox service).

When a mail M addressed to the data processing system 4 is input (put in the post) from the data processing system 3 for example, the host 2 once stores the mail M in the mailbox MB for the data processing system 4. Upon receipt of a request for transferring from the data processing system 4 or at a predetermined time, the host 2 transfers (delivers) the mail M to the data processing system 4.

Each of the data processing systems 3, 4 is a stand-alone computer system composed of, for example, a personal computer, display unit, hard disk etc. and various kinds of application programs can be used with it.

In the data processing systems 3, 4, an electronic mail terminal utility 5, which is a kind of application program, performs processing on signals concerned with mail services provided by the host 2.

The electronic mail terminal utility 5 maintains a user mail server 6 which is a data base having a plurality of folders for storing data associated with electronic mails, and a folder table 7 in which types of data are shown in relation to folder names for ready reference.

The contents of the user mail server 6 and the folder table 7 are created individually for each of the data processing systems 3, 4 and therefore their contents in the data processing system 3 are usually different from those of the data processing system 4. However, the users of the data processing systems 3, 4 may make arrangements for using the same number of folders and/or the same folder names. In the data processing system 4 of this embodiment, the user mail server 6 has, as shown in FIG. 1, a message folder Fm, a shared folder F0 and three dedicated folders F1 to F3 as receiving folders.

FIG. 2 shows the arrangement of data in the mail M. The mail M is composed of a content part MC containing optional information to be conveyed from one end user to another and an envelop part ME containing control information used to correctly transmit the content part MC and to properly manage the content part MC at the receiving side.

The content part MC is composed of one or a plurality of heading files HF that are a group of text data corresponding to message information and one or a plurality of attachment files AF that are attached to the heading files HF in order to send data information. The file arrangement (i.e., the number and type of data files which are a collection of data representing optional information) of the content part MC varies for every case. In some cases, the mail M to be transmitted includes the content part MC which consists of only data files corresponding to message information or only data files corresponding to data information.

The format of the envelop part ME is fixed in the electronic mail system 1 and the envelop part ME is composed of 13 items of directory data D1 to D13 by which processing operations performed by the host 2 and the data processing systems 3, 4 are specified.

The directory data D1 to D13 are 13 items of data indicating a serial No. allocated to every mail M; the postal indication of the mail M (ordinary, registered, confidential, express, multiple address etc.); the name of the mail M; an addresser's identification code; an addressee's identification code; a sending date; the length of the mail M (excluding the attachment files AF); the number of attachment files AF; the name of the attachment file AF; the attribute of the attachment file AF; the length of the attachment file AF; the name of the specified folder; and the presence or absence of a request for creating a new folder, respectively.

One set of the directory data D9 to D13 corresponds to one attachment file AF, and therefore, when N-number of

attachment files AF exist in the content part MC, N-sets of directory data D9 to D13 are written in the envelop part ME.

The attribute of the attachment file AF mentioned herein is the type of file classified in accordance with a desired feature such as applications software used for creating the file, or the presence or absence of a protect.

FIGS. 3 and 4 schematically show the flow of the processing performed by the electronic mail terminal utility 5.

The electronic mail terminal utility (hereinafter referred to as "utility") 5 has four functions, i.e., creating the mail M, transmitting the mail M, receiving the mail M and environment setting such as registering the management conditions of the mail M.

When the operator of the data processing system 4 for example starts up the utility 5, the utility 5 displays a function-selection screen (initial menu) on a display unit, showing the four functions as well as termination as commands to be selected, and checks which command has been selected from the initial menu.

[Creating the mail M]

When the operator selects the mail creating function, the utility 5 writes a mail name, an addresser's identification code and an addressee's identification code in the envelop part ME as the directory data D3, D4, D5, these pieces of information having been input by the operator through a key board. Thereafter, the utility 5 displays an interactive screen to require an operator's instruction and then executes editing processing for creating the content part MC (#11 to 13).

Upon receipt of an instruction to terminate the editing, the utility 5 executes attachment file register processing for writing the name of the attachment file AF (directory data D9) in the envelop part ME. Then, the utility 5 calculates the length of the attachment file AF and the length of the mail M to store in the envelop part ME as the directory data D11, D7 (#14 to 17). The substantially finished mail M is stored in the transmitting folder (#18).

FIG. 5 shows the flow of the attachment file register processing of FIG. 3.

In this sub-routine, the utility 5 writes the attachment file name input by the operator in the envelop part ME as the directory data D9 (#161). With this step, one attachment file AF has been registered as transmitted data.

When specifying a folder for storing the attachment file AF at the receiving side, the name of the specified folder is written as the directory data D12. If a request for creating a new folder is made when the specified folder does not exist at the receiving side, a flag for indicating the presence of the request is set and stored as the directory data D13 (#162 to 165).

If there are a plurality of attachment files AF, the same processing is performed for every attachment file AF, and then, the program proceeds to Step 17 in FIG. 3 (#166).

[Transmitting the mail M]

When the operator selects the transmitting function in the initial menu (see FIG. 3), the utility 5 firstly displays a list of mails M stored in the transmitting folder (#21).

The utility 5 selects one or a plurality of mails M specified by the operator as data to be transmitted. In response to a transmitting instruction sequentially input by the operator, a sending date (directory data D6) is written in the envelop part ME of the mail M selected as data to be transmitted and then the mail M is sent to the host 2 (#22 to 26).

[Receiving the mail M]

When the operator selects the receiving function in the initial menu, the utility 5 makes enquiries to the host 2 about the presence or absence of the mail M addressed to the data processing system 4, and performs receiving processing for receiving the mail M if there exists (#31, 32). During the receiving processing, the heading file HF is stored in the message folder FM whilst the attachment file AF is once stored in the shared folder F0.

Thereafter, the utility 5 performs attachment file analysis processing in which a folder suited for the attachment file AF is set and the attachment file AF is transferred from the shared folder F0 to the set, suitable folder (one of the dedicated folders F1 to F3 or a new folder) (#33, 34, 35). In short, the attachment file AF is classified (attribute identification) and stored. This facilitates the editing operation (processing) of the attachment file AF which will be performed later by the use of applications software.

FIG. 6 shows the flow of the attachment file analysis processing of FIG. 4.

If folders are specified for all the attachment files AF of the mail M at the transmitting side and there exist all the specified folders within the user mail server 6, the utility 5 sets, in this sub-routine, the dedicated folders F1 to F3 specified by the directory data D12 (the name of a specified folder) as folders suitable for storing the attachment files AF (i.e., transferring destination for the attachment files AF) and terminates the processing of the sub-routine (#341 to 344).

If a request for creating a new folder is made when the folder specified by the transmitting side does not exist within the user mail server 6, a new folder having the specified name is created and set as the transferring destination for the attachment file AF. On the other hand, if there is no request for creating a new folder, the specified folder name is deleted and the folder specification is canceled (#345 to 347).

If a folder for storing the attachment file AF is not specified by the transmitting side, the utility 5 reads data of a specified length (header) recorded in the leading end of the attachment file AF as file attribute information Att (#348).

The utility 5 then searches the folder table 7 in order to check the presence or absence of the read file attribute information Att. FIG. 7 shows one example of the contents of the folder table 7. In FIG. 7, each code which appears in the column of header code strings (file attribute information Att) corresponds to a file name. By collating the codes listed in the column of header code strings with the code in the leading end of the attachment file AF, the folder name corresponding to the attachment file AF can be retrieved (#349, 350).

If the file attribute information Att is found in the folder table 7, the folder name corresponding to the file attribute information Att is read and one of the dedicated folders F1 to F3 having the folder name which has been read is set as the transferring destination for the attachment file AF (#351, 352).

If the attachment file AF is, for example, a text document, the file attribute information Att is the ASCII code which corresponds to the first character of the document or a specific code (extension) given by the applications software which the operator at the transmitting side has used when creating the attachment file AF. In the latter case, the value of the specific code varies depending on the applications software which has been used.

It is to be understood from the above description that, in the attachment file analysis processing, the transferring destination for the attachment file AF which is a sort of data file is set in accordance with specific data stored in the mail M, such as the directory data D12 in the envelop part ME or the file attribute information Att which is part of the attachment file AF.

If the transferring destination for the attachment file AF is not set in the attachment file analysis processing, the attachment file AF will not be transferred but kept in the shared folder F0.

[Environment setting]

Reference is again made to FIGS. 3 and 4. When the operator selects the environment setting function in the initial menu, the utility 5 performs condition defining processing (#41).

FIG. 8 shows the flow of the condition defining processing of FIG. 4.

In response to an input of table data composed of the file attribute information Att and a folder name, the utility 5 firstly enters the file attribute information Att in the folder table 7 (#411, 412, 415).

If the dedicated folders F1 to F3 do not have the input folder name, a new dedicated folder is created and the input folder name is put to the new folder. Then, the folder name is entered in the table folder 7 in combination with the file attribute information Att (#413, 414, 416).

According to the foregoing embodiment, the directory data D12 (a specified folder name) for instructing the management condition of the attachment file AF at the receiving side is written in the envelop part ME of which format is fixed in the electronic mail system 1. With this arrangement, there is no need to decide between users where the data is to be written, unlike the case where information instructing the management condition of the attachment file AF is written in the content part MC as message information.

As a result, a new user can specify a folder to the receiving side without difficulties and reading of data by the electronic mail terminal utility 5 is facilitated.

According to the foregoing embodiment, since the attachment file AF is classified in accordance with the file attribute information Att originally included in the attachment file AF, there is no need to write data for instructing the management condition of the attachment file AF in every mail at the transmitting side. This saves labour in creating a mail.

According to the foregoing embodiment, since the attachment files AF are classified by applications software and stored, when the attachment file AF is edited (processed) at the receiving side by the use of the same applications software as used for creating, the operation can be easily performed.

Although the attachment files AF are classified at the receiving side in the foregoing embodiment, the heading files HF containing message information may be classified instead.

Although the foregoing embodiment has been described with the mail M having the content part MC containing message information (heading files HF) and data information (attachment files AF), the invention can also be applied to a mail having no message information.

Although the present invention has been fully described by way of example with reference to the accompanying drawings, it is to be noted that various changes and modification will be apparent to those skilled in the art. Therefore, unless otherwise such changes and modifications depart from the scope of the present invention, they should be construed as being included therein.

I claim:

1. A computer program, to be stored in a computer system, by which said computer system executes the steps of:

receiving electronic mail from an external host processor which undertakes the management of mailboxes;

automatically classifying a data file written in the received electronic mail in accordance with specific data included in the received electronic mail; and

automatically selecting one of the folders each of which is for storing electronic mail in accordance with a result of the classification.

2. The computer program as claimed in claim 1, wherein the specific data represents an attribute of the data file.

3. The computer program as claimed in claim 1, wherein the specific data represents a request for selecting a specific folder.

4. A computer system, comprising:

receiving means for receiving electronic mail from an external host processor which undertakes the management of mailboxes;

a plurality of folder means for storing electronic mail; and

management means for automatically classifying a data file written in the received electronic mail in accordance with specific data included in the received electronic mail, and automatically selecting one of the folders for storing the data file in accordance with a result of the classification.

5. The computer system as claimed in claim 4, wherein the specific data represents an attribute of the data file.

6. The computer system as claimed in claim 4, wherein the specific data represents a request for selecting a specific folder.

7. A method for receiving electronic mail from an external host processor which undertakes the management of mailboxes, said method comprising the steps of:

receiving electronic mail from the external host processor;

automatically classifying a data file written in the received electronic mail in accordance with specific data included in the received electronic mail; and

automatically selecting one of the folders each of which is for storing electronic mail in accordance with a result of the classification.

8. The computer system as claimed in claim 7, wherein the specific data represents an attribute of the data file.

9. The computer system as claimed in claim 7, wherein the specific data represents a request for selecting a specific folder.

10. An electronic mail processing system comprising:

receiving means for receiving electronic mail sent from a computer system;

a plurality of folders for storing electronic mail; and

management means for automatically classifying a data file written in the received electronic mail in accordance with specific data included in the electronic mail, and automatically selecting one of the folders for storing the data file in accordance with a result of the classification.

11. The electronic mail processing system as claimed in claim 10, wherein the specific data represents an attribute of the data file.

12. The electronic mail processing system as claimed in claim 10, wherein the specific data represents a request for selection of a specific folder.

13. A method for receiving electronic mail from a computer system, said method comprising the steps of:

receiving electronic mail sent from the computer system;

automatically classifying a data file written in the received electronic mail in accordance with specific data included in the received electronic mail; and

automatically selecting one of the folders each of which is for storing electronic mail in accordance with a result of the classification.

14. The method as claimed in claim 13, wherein the specific data represents an attribute of an attachment file attached to said electronic mail.

15. The method as claimed in claim 13, wherein the specific data is a header of an attachment file attached to said electronic mail.

16. An electronic mail processing system comprising:

a memory which stores electronic mail sent from an external computer system, the electronic mail comprising an envelope part and a content part; and

a processor which executes a specific process to the received electronic mail in a case that the content part has specific data.

17. The electronic mail processing system as claimed in claim 16, wherein the specific data is a header of an attachment file.

18. The electronic mail processing system as claimed in claim 16, wherein the specific process is for sending said electronic mail to a specific folder.

19. An electronic mail processing system comprising:

receiving means for receiving electronic mail from a host processor which undertakes the management of mailboxes;

management means for automatically classifying a data file written in the received electronic mail in accordance with specific data included in the electronic mail; and

means for automatically storing the data file in accordance with the classification.

20. The electronic mail processing system as claimed in claim 19, wherein the specific data represents an attribute of the data file.

21. A computer program, to be stored in a computer system, by which said computer system executes the steps of:

receiving electronic mail from a host processor which undertakes the management of mailboxes;

automatically classifying a data file written in the received electronic mail in accordance with specific data included in the electronic mail; and

automatically storing the data file in accordance with the classification.

22. The computer program as claimed in claim 21, wherein the specific data represents an attribute of the data file.

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